Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Improvements to Roads And Drains at 4th ,5th, 6th ,7th Cross Road at Judicial Layout in ward no.04

							Estimate Cost Rs.	150.00 Lakhs
Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Providing Stone Slabs of drains and Pointing in C.M(1:3). (Page No 25., I.No.5.33 of KPWD								
	76.00							
	8.36							
	84.36							
	5.06							
	89.42							
	2	160.00	1.00		320.00			
	2	133.50	1.00		267.00			
	2	102.00	1.00		204.00			
	2	84.00	1.00		168.00			
	2	253.00	1.00		506.00			
	2	80.00	1.00		160.00			
	2	83.00	1.00		166.00			
	2	55.00	1.00		110.00			
	2	58.00	1.00		116.00			
Devinda nagar	2	188.00	1.00		376.00			
	2	171.00	1.00		342.00			
	2	196.00	1.00		392.00			
	2	214.00	1.00		428.00			
	2	106.00	1.00		212.00			
	2	144.00	1.00		288.00			
	2	288.00	1.00		576.00			
	2	160.00	1.65		528.00			
	2	133.50	1.65		440.55			
	2	102.00	1.65		336.60			
	2	84.00	1.65		277.20			
	2	253.00	1.65		834.90			
	2	80.00	1.65		264.00			
	2	83.00	1.65		273.90			
	2	55.00	1.65		181.50			
	2	58.00	1.65		191.40			
	2	188.00	1.65		620.40			
	2	171.00	1.65		564.30			
	2	196.00	1.65		646.80			
	2	214.00	1.65		706.20			
	2	106.00	1.65		349.80			
	2	144.00	1.65		475.20			
	2	288.00	1.65		950.40			
Total Qty					12272.15			
Consider 30% of total Qty					3681.65	Sqm	89.42	329218.59

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Providing precast slab of 100 mm thick including cost of all materials, labour, carriage,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge-								
Basic rate	2100.00							
Add Total qty of Item no -1 of precast slab					60.51			
					60.51	**Sqm**	**2100.00**	**127071.00**
Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including curing etc., complete. 7.5cm thick (Page No 25., I.No.5.31.1 of KPWD S.R 2016-17).								
Basic rate	628.00							
ADD-HOC	69.08							
Sub Total-1	697.08							
GST	41.82							
Sub Total-2	738.90							
Say Rounded 10% of Total qty of Item no -1					1227.22			
					1227.22	**Sqm**	**738.90**	**906795.05**
KDWB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. EARTH / Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17).								
Basic rate	82.00							
ADD-HOC	9.02							
Sub Total-1	91.02							
GST	5.46							
Sub Total-2	96.48							
Addl ct & lt, transport	100.00							
Sub Total-3	196.48							
Chd main	2	160.00	0.50	0.50	80.00			
Cut main	2	133.50	0.50	0.50	66.75			
Tth cross	2	102.00	0.50	0.50	51.00			
cross road -1	2	84.00	0.50	0.50	42.00			
cross road -2	2	253.00	0.50	0.50	126.50			
cross road -3	2	80.00	0.50	0.50	40.00			
cross road -4	2	83.00	0.50	0.50	41.50			
Sixth cross	2	55.00	0.50	0.50	27.50			
	2	58.00	0.50	0.50	29.00			
	2	188.00	0.50	0.50	94.00			
	2	171.00	0.50	0.50	85.50			
	2	196.00	0.50	0.50	98.00			
	2	214.00	0.50	0.50	107.00			
	2	106.00	0.50	0.50	53.00			
	2	144.00	0.50	0.50	72.00			
	2	288.00	0.50	0.50	144.00			
Less Cut portion								
Chd main	1	160.00	1.00	0.35	56.00			
Cut main	1	133.50	1.00	0.35	46.73			
Tth cross	1	102.00	1.00	0.35	35.70			
cross road -1	1	84.00	1.00	0.35	29.40			

SR No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	cross road -2	1	253.00	1.00	0.35	88.55			
	cross road -3	1	80.00	1.00	0.35	28.00			
	cross road -4	1	83.00	1.00	0.35	29.05			
	3rd cross	1	55.00	1.00	0.35	19.25			
		1	58.00	1.00	0.35	20.30			
		1	188.00	1.00	0.35	65.80			
		1	171.00	1.00	0.35	59.85			
		1	196.00	1.00	0.35	68.60			
		1	214.00	1.00	0.35	74.90			
		1	106.00	1.00	0.35	37.10			
		1	144.00	1.00	0.35	50.40			
		1	288.00	1.00	0.35	100.80			
	Bad reaches	17	15.00	6.00	0.40	612.00			
	culvert	2	8.00	1.50	1.20	28.80			
						2608.98	**Cum**	**196.48**	**512614.54**
	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.2)/ PWD SR 2016-17								
	Basic rate	5046.00							
	11% AD-HOC	555.06							
	Sub Total-1	5601.06							
	6% AW	336.06							
	Sub Total-2	5937.12							
	culvert	2	8.00	1.50	0.15	3.60			
						3.60	**Cum**	**5937.12**	**21,373.64**
	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.23/I.5.9)/ PWD SR 2016-17								
	Basic rate	5005.00							
	11% AD-HOC	550.55							
	Sub Total-1	5555.55							
	6% AW	333.33							
	Sub Total-2	5888.88							
	culvert	4	8.00	0.45	0.70	10.08			
						10.08	**Cum**	**5888.88**	**59,359.94**
	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs. with 20mm and down size graded granite metal coarse aggregates at 0.78cum and fine aggregates at 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. (P.No.12, I.No.4.6 of PW, P&IWTD SR2016-17)								
	Basic rate	5441.00							
	11% AD-HOC	598.51							
	Sub Total-1	6039.51							
	6% AW	362.37							
	Sub Total-2	6401.88							

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
culvert	4	8.00	0.45	0.10	1.44			
					1.44	**Cum**	**6401.88**	**9,218.71**
Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge-(Data rate)								
Basic rate	5111.00							
	2	8.00	1.50		24.00			
					24.00	**Sqm**	**5111.00**	**122664.00**
KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
Basic rate	1571.00							
10% AD-HOC	172.81							
Sub Total-1	1743.81							
6% AIW	104.63							
Sub Total-2	1848.44							
USD Cut portion								
Cntl main	1	160.00	1.00	0.15	24.00			
Cut main	1	133.50	1.00	0.15	20.03			
Tth cross	1	102.00	1.00	0.15	15.30			
cross road -1	1	84.00	1.00	0.15	12.60			
cross road -2	1	253.00	1.00	0.15	37.95			
	1	80.00	1.00	0.15	12.00			
	1	83.00	1.00	0.15	12.45			
	1	55.00	1.00	0.15	8.25			
	1	58.00	1.00	0.15	8.70			
	1	188.00	1.00	0.15	28.20			
	1	171.00	1.00	0.15	25.65			
	1	196.00	1.00	0.15	29.40			
	1	214.00	1.00	0.15	32.10			
	1	106.00	1.00	0.15	15.90			
	1	144.00	1.00	0.15	21.60			
	1	288.00	1.00	0.15	43.20			
Balf reaches	17	15.00	6.00	0.15	229.50			
					576.83	**Cum**	**1848.44**	**1066225.60**
KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No.158 I.No.20.18)								
Basic rate	1668.00							
10% AD-HOC	183.48							
Sub Total-1	1851.48							
6% AIW	111.09							
Sub Total-2	1962.57							
USD Cut portion								

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
[illegible] main	1	160.00	1.00	0.225	36.00			
[illegible] main	1	133.50	1.00	0.225	30.04			
[illegible] cross	1	102.00	1.00	0.225	22.95			
cross road -1	1	84.00	1.00	0.225	18.90			
cross road -2	1	253.00	1.00	0.225	56.93			
cross road -3	1	80.00	1.00	0.225	18.00			
	1	83.00	1.00	0.225	18.68			
	1	55.00	1.00	0.225	12.38			
	1	58.00	1.00	0.225	13.05			
	1	188.00	1.00	0.225	42.30			
	1	171.00	1.00	0.225	38.48			
	1	196.00	1.00	0.225	44.10			
	1	214.00	1.00	0.225	48.15			
	1	106.00	1.00	0.225	23.85			
	1	144.00	1.00	0.225	32.40			
	1	288.00	1.00	0.225	64.80			
[illegible] reaches	17	15.00	6.00	0.225	344.25			
					865.24	Cum	1962.57	1698088.12
Providing and applying primer coat with ss bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
Basic rate	26.00							
10% AD-HOC	2.86							
Sub Total-1	28.86							
6% AW	1.73							
Sub Total-2	30.59							
Less Cut portion								
[illegible] main	1	160.00	1.00		160.00			
[illegible] main	1	133.50	1.00		133.50			
[illegible] cross	1	102.00	1.00		102.00			
cross road -1	1	84.00	1.00		84.00			
cross road -2	1	253.00	1.00		253.00			
cross road -3	1	80.00	1.00		80.00			
cross road -4	1	83.00	1.00		83.00			
[illegible] cross	1	55.00	1.00		55.00			
	1	58.00	1.00		58.00			
	1	188.00	1.00		188.00			
	1	171.00	1.00		171.00			
	1	196.00	1.00		196.00			
	1	214.00	1.00		214.00			
	1	106.00	1.00		106.00			
	1	144.00	1.00		144.00			
	1	288.00	1.00		288.00			
[illegible] reaches	17	15.00	6.00		1530.00			
Profile correction								
[illegible] main	1	160.00	2.50		400.00			
	1	133.50	2.50		333.75			
	1	102.00	2.50		255.00			
	1	84.00	2.50		210.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	253.00	2.50		632.50			
	1	80.00	2.50		200.00			
	1	83.00	2.50		207.50			
	1	55.00	2.50		137.50			
	1	58.00	2.50		145.00			
	1	188.00	2.50		470.00			
	1	171.00	2.50		427.50			
	1	196.00	2.50		490.00			
	1	214.00	2.50		535.00			
	1	106.00	2.50		265.00			
	1	144.00	2.50		360.00			
	1	288.00	2.50		720.00			
					9634.25	**Sqm**	**30.59**	**294727.12**
MSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity HMLP with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
Basic rate	6717.00							
11% AD-HOC	738.87							
Sub Total-1	7455.87							
6% ADV	447.35							
Sub Total-2	7903.22							
UNIT/Cut portion								
2nd main	1	160.00	1.00	0.05	8.00			
1st main	1	133.50	1.00	0.05	6.68			
7th cross	1	102.00	1.00	0.05	5.10			
	1	84.00	1.00	0.05	4.20			
	1	253.00	1.00	0.05	12.65			
	1	80.00	1.00	0.05	4.00			
	1	83.00	1.00	0.05	4.15			
	1	55.00	1.00	0.05	2.75			
	1	58.00	1.00	0.05	2.90			
	1	188.00	1.00	0.05	9.40			
	1	171.00	1.00	0.05	8.55			
	1	196.00	1.00	0.05	9.80			
	1	214.00	1.00	0.05	10.70			
	1	106.00	1.00	0.05	5.30			
	1	144.00	1.00	0.05	7.20			
	1	288.00	1.00	0.05	14.40			
Bad reaches	17	15.00	6.00	0.05	76.50			
Profile correction								
2nd main	1	160.00	2.50	0.05	20.00			
	1	133.50	2.25	0.05	15.02			
	1	102.00	2.25	0.05	11.48			
	1	84.00	2.25	0.05	9.45			
	1	253.00	2.25	0.05	28.46			
	1	80.00	2.25	0.05	9.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	83.00	2.25	0.05	9.34			
	1	55.00	2.25	0.05	6.19			
	1	58.00	2.25	0.05	6.53			
	1	188.00	2.25	0.05	21.15			
	1	171.00	2.25	0.05	19.24			
	1	196.00	2.25	0.05	22.05			
	1	214.00	2.25	0.05	24.08			
	1	106.00	2.25	0.05	11.93			
	1	144.00	2.25	0.05	16.20			
	1	288.00	2.25	0.05	32.40			
					454.77	**Cum**	**7903.22**	**3594138.48**
[illegible] 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 502. (P.No.161 & I.No.21.2)								
[illegible] rate	3.00							
[illegible]-HOC	0.33							
[illegible] Total-1	3.33							
[illegible]	0.20							
[illegible] Total-2	3.53							
[illegible] main	1	160.00	5.50		880.00			
	1	133.50	5.60		747.60			
	1	102.00	5.30		540.60			
	1	84.00	5.10		428.40			
	1	253.00	6.80		1720.40			
	1	80.00	4.60		368.00			
	1	83.00	5.10		423.30			
	1	55.00	4.30		236.50			
	1	58.00	5.30		307.40			
	1	188.00	5.30		996.40			
	1	171.00	6.50		1111.50			
	1	196.00	4.60		901.60			
	1	214.00	6.50		1391.00			
	1	106.00	5.60		593.60			
	1	144.00	4.50		648.00			
	1	288.00	5.30		1526.40			
					12820.70	**Sqm**	**3.53**	**45,254.51**
[illegible] 500-7:Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen [illegible] on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with [illegible] set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of [illegible] complete as per Specifications.(P.No.160 & I.No.21.7)								
[illegible] rate	11.00							
[illegible]-HOC	1.21							
[illegible] Total-1	12.21							
[illegible]	0.73							
[illegible] Total-2	12.94							
[illegible] main	1	160.00	5.50		880.00			
	1	133.50	5.60		747.60			
	1	102.00	5.30		540.60			
	1	84.00	5.10		428.40			
	1	253.00	6.80		1720.40			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	80.00	4.60		368.00			
	1	83.00	5.10		423.30			
	1	55.00	4.30		236.50			
	1	58.00	5.30		307.40			
	1	188.00	5.30		996.40			
	1	171.00	6.50		1111.50			
	1	196.00	4.60		901.60			
	1	214.00	6.50		1391.00			
	1	106.00	5.60		593.60			
	1	144.00	4.50		648.00			
	1	288.00	5.30		1526.40			
					12820.70	**Sqm**	**12.94**	**165933.19**
MS00- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with mechanical paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH Specification clause No.500.9 complete in all respects complete as per specifications MORTH Specification No.509 (P.No.164 Item No.21.22.6)								
Basic rate	7659.00							
ROAD-HOC	842.49							
Sub Total-1	8501.49							
6% AW	510.09							
Sub Total-2	9011.58							
Shell main	1	160.00	5.50	0.04	35.20			
	1	133.50	5.60	0.04	29.90			
	1	102.00	5.30	0.04	21.62			
	1	84.00	5.10	0.04	17.14			
	1	253.00	6.80	0.04	68.82			
	1	80.00	4.60	0.04	14.72			
	1	83.00	5.10	0.04	16.93			
	1	55.00	4.30	0.04	9.46			
	1	58.00	5.30	0.04	12.30			
	1	188.00	5.30	0.04	39.86			
	1	171.00	6.50	0.04	44.46			
	1	196.00	4.60	0.04	36.06			
	1	214.00	6.50	0.04	55.64			
	1	106.00	5.60	0.04	23.74			
	1	144.00	4.50	0.04	25.92			
	1	288.00	5.30	0.04	61.06			
					512.83	**Cum**	**9011.58**	**4621390.24**
Providing and fixing pre cast solid **cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete (P.No-25, I No-5.30)								
Basic rate	313.00							
ROAD-HOC	34.43							
Sub Total-1	347.43							
6% AW	20.85							
Sub Total-2	368.28							
missing & damaged	2	220.00			440.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
[illegible]				A	440.00			
				B	978.00	Nos	368.28	360173.73
[illegible] 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved [illegible] on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No-183, I No-24.1)								
[illegible]	60.00							
[illegible]	6.60							
[illegible]	66.60							
[illegible]	4.00							
[illegible]	70.60							
	2	600.00	0.35		420.00			
					420.00	Sqm	70.60	29,650.32
[illegible] W800-13: Road marking with hot applied thermoplastic compound with reflect rising glass [illegible] on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm [illegible] including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of [illegible] to level, uniform and free from streaks and holes complete as per specifications. MORTH [illegible] No. 803, No. 1974 (P.No.185 & I.No.24.15)								
[illegible]	512.00							
[illegible]	56.32							
[illegible]	568.32							
[illegible]	34.10							
[illegible]	602.42							
[illegible]	2	160.00	0.10		32.00			
	2	133.50	0.10		26.70			
	2	102.00	0.10		20.40			
	2	84.00	0.10		16.80			
	2	253.00	0.10		50.60			
	2	80.00	0.10		16.00			
	2	83.00	0.10		16.60			
	2	55.00	0.10		11.00			
	2	58.00	0.10		11.60			
	2	188.00	0.10		37.60			
	2	171.00	0.10		34.20			
	2	196.00	0.10		39.20			
	2	214.00	0.10		42.80			
	2	106.00	0.10		21.20			
	2	144.00	0.10		28.80			
	2	288.00	0.10		57.60			
					463.10	Sqm	602.42	278980.33
[illegible] M800 Road markers / Road stud KSRRB M800-35. Providing and fixing of road stud 100x 100 [illegible] diecast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, [illegible] in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in [illegible] bituminous grout or epoxy mortar, all as per BS: 873 part 4:1973 complete as per [illegible] (P.No-189,I No-24.41)								
[illegible]	339.00							
[illegible]	37.29							
[illegible]	376.29							
[illegible]	22.58							
[illegible]	398.87							
		4000.00			8000.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
					1333.33	Nos	398.87	531823.20
							Total Construction Cost	14774700.31
							DPR & PMC Charges	225000.00
							Sub Total	14999700.31
							Utility Shifting, Miscellaneous, Rounding off	299.69
							GRAND TOTAL	15000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates.

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division,
BBMP Bangalore
7/2/18

Administrative Approval
Accorded For 150.00 lakhs only
Head of A/C P-2415
CER NO : 639 Dt: 08/02/2018
E.E. (Project)

Technical Sanction
Accorded For 150.00 lakhs only
Head of A/C P-2415
CER NO : 639 Dt: 08/02/2018
TA
CE (YNK)